



**DES**  
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# **PART 70**

## **TECHNICAL SUPPORT DOCUMENT**

### **(STATEMENT of BASIS)**

APPLICATION FOR:  
**Reopenings for Cause and Minor Revisions**

SUBMITTED BY:  
United States Air Force, Creech AFB, 432<sup>nd</sup> Wing  
1065 Perimeter Road  
Creech AFB, Nevada 89018

FOR:  
United States Air Force 432<sup>nd</sup> Wing, Creech Air Force Base  
**Source ID: 473**

SIC code 9711, "National Security"  
NAICS code 928110, "National Security"

November 10, 2021

## EXECUTIVE SUMMARY

Creech Air Force Base is a federally-owned military installation located within the city limits of Indian Springs, Nevada. The base is divided into two geographic areas: the Main Base and the Southern Ranges of the Nellis Testing and Training Range (NTTR). The Main Base, located adjacent to the township of Indian Springs, Nevada, within are in the Indian Springs Valley Hydrographic Area (161), consists of the flight line and an associated industrial infrastructure that directly supports flying operations along with a wide variety of commercial and industrial uses which are in support of the base's mission. The NTTR, located to the south of the Main Base, encompassing Hydrographic Areas 160, 161, 168, 211, and 212, consists of approximately 2.9 million acres of BLM land, a portion of which is situated in Clark County, that has been withdrawn from public domain for military use as an armament and high hazard testing area.

Hydrographic Area 212 is currently designated as attainment for all pollutants except ozone; it was designated a marginal nonattainment area for ozone on August 3, 2018. The designation has not imposed any new requirements at this time. All other Hydrographic Areas mentioned above are designated as attainment areas for all criteria pollutants.

Creech AFB (Main Base) operates under the authority of the 432<sup>nd</sup> Wing Commander, located at Creech AFB, whereas; the NTTR operations located on the main base operates under the authority of the 99 Air Base Wing Commander, located at Nellis AFB. The source falls under SIC Code 9711: National Security and NAICS Code 928110: National Security.

Creech AFB is a major stationary source for NO<sub>x</sub> and a minor source of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, SO<sub>2</sub>, VOC, and HAP pollutants. Creech AFB is not a categorical stationary source.

The following table summarizes the source potential to emit for each regulated air pollutant from all emission units addressed by this Part 70 Operating Permit (OP).

Pollutant	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAPs	GHG <sup>2</sup>
Tons/year	20.22	11.95	193.80	48.82	0.92	36.88	9.47	37,014.94
Major Source Thresholds (Title V)	100	100	100	100	100	100	10/25 <sup>1</sup>	-
Major Stationary Source Thresholds (PSD)	250	250	250	250	250	250	10/25 <sup>1</sup>	-
Non-Attainment Thresholds (HA 212)	-	-	100	-	-	100	-	-

<sup>1</sup>Ten tons for any individual HAP or 25 tons for combination of all HAPs.

<sup>2</sup>Metric tons per year CO<sub>2</sub>e.

DAQ will continue to require the sources to estimate their GHG potential to emit in terms of each individual pollutant (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, CF<sub>6</sub>, etc.) and the TSD includes these PTEs for informational purposes.

This national security facility is subject to 40 CFR Part 60, Subpart OOO, 40 CFR Part 60, Subpart IIII, and 40 CFR Part 63, Subpart ZZZZ. The engines subject to 40 CFR Part 60, Subpart IIII, satisfy the requirements of 40 CFR Part 63, Subpart ZZZZ, through compliance with 40 CFR Part 60, Subpart IIII.

Air Quality has received delegated authority from the United States Environmental Protection Agency to implement the requirement of the Part 70 OP. Based on the information submitted by the applicant, supplemental information provided to the application, and a technical review performed by DAQ staff, the draft revision to the Part 70 OP to Creech AFB is proposed.

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## I. ACRONYMS

**Table I-1: List of Acronyms**

<b>Acronym</b>	<b>Term</b>
AFB	Air Force base
AQR	Clark County Air Quality Regulation
AST	aboveground storage tank
Avgas	aviation gasoline
BACT	Best Available Control Technology
CAA	Clean Air Act
CE	control efficiency
CF	control factor
CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
DAQ	Clark County Division of Air Quality
EF	emission factor
EPA	U.S. Environmental Protection Agency
EU	emission unit
GDO	gasoline dispensing operation
GHG	greenhouse gases
HAP	hazardous air pollutant
hp	horsepower
MACT	Maximum Achievable Control Technology
MMBtu	Millions of British Thermal Units
NEI	net emission increase
NO <sub>x</sub>	nitrogen oxides
PM <sub>10</sub>	particulate matter less than 10 microns
PM <sub>2.5</sub>	particulate matter less than 2.5 microns
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTE	potential to emit
RACT	Reasonably Available Control Technology
RICE	reciprocating internal combustion engine
SO <sub>2</sub>	sulfur dioxide
TSD	Technical Support Document
UST	underground storage tank
VOC	volatile organic compound

## II. SOURCE INFORMATION

### A. GENERAL

Permittee	United States Air Force, Creech AFB 432 <sup>nd</sup> Wing
Source	Creech Air Force Base
Mailing Address	1065 Perimeter Road Indian Springs Nevada 89018
Responsible Official	Eric Schmidt, Commander
Phone Number	(702) 404-0101
Contacts	Christopher Perkins, Air Quality Program Manager
Phone Number	(702) 652-8897
Hydrographic Area	161

### B. PERMITTING HISTORY

**Table II-B-1: Permit History**

Issue Date	Description
02/20/2020	Title V Renewal issued with a minor revision
04/30/2020	Minor Permit Application 10/31/2019 – addition of a 1,220 hp emergency generator and revision of insignificant activity tank calculations Minor Permit Application 01/28/2020 - addition of a 69 hp emergency generator

### C. CURRENT PERMITTING ACTION

#### Reopen for Cause – January 28, 2021

A reopen for cause was initiated on January 28, 2018 to address PM<sub>2.5</sub> emissions for all emission units with particulate emission potential. No response was received from the source to DAQ's Notification to reopen the Title V Operating Permit; therefore, DAQ's PM<sub>2.5</sub> EF memo was utilized for each emission unit and activity related to processing, transporting, and/or sorting materials to incorporate the PM<sub>2.5</sub> emissions into the Title V Operating Permit for the stockpiles, haul roads, and char handling operations.

PM<sub>2.5</sub> emissions for the mineral processing operations have been revised in this permitting action.

#### Reopen for Cause – August 9, 2021

The Department of Environment and Sustainability, Division of Air Quality (DAQ) has identified this source as possibly emitting 25 tons or more of actual emissions for oxides of nitrogen (NO<sub>x</sub>) and/or volatile organic compounds (VOCs) in any calendar year. Clark County was required to implement Section 182(a)(3)(B) of the Clean Air Act (CAA) which requires all ozone nonattainment areas to have in place a program that requires emissions statements from stationary sources of NO<sub>x</sub> and/or VOCs.

Section 12.9.1 of the Clark County Air Quality Regulations (AQRs) codifies this requirement for Clark County and states the following:

- a. The Responsible Official of each Stationary Source that emits 25 tons or more of NO<sub>x</sub> and/or VOC shall submit an Annual Emissions Statement (Statement) to the department for the previous calendar year.
- b. Pursuant to CAA Section 182, the Statement must include all actual emissions for all NO<sub>x</sub> and VOC emitting activities.
- c. The Statement shall be submitted to and received by the department on or before March 31 of each year or other date, upon prior notice by the Control Officer, and shall include a certification that the information contained in the Statement is accurate to the best knowledge of the individual certifying the Statement.

A condition requiring submittal of annual emission statement has been included in the permit.

#### Reopen for Cause – October 18, 2021

This source is an existing major source that has a potential to emit of fugitive particulate emissions. The Division of Air Quality (DAQ) is revising the permit pursuant to Sections 12.5.2.15 of the Clark County Air Quality Regulations (AQR), which maintain that the Control Officer may reopen and revise a permit “to assure compliance with the applicable requirements.” This permit is revised to include recently promulgated fugitive dust requirements for stationary sources.

AQR Sections 92 (Fugitive Dust from Unpaved Parking Lots and Storage Areas) and 94 (Permitting and Dust Control for Construction Activities) were recently revised to address fugitive dust at stationary sources. The revised regulations became effective on August 17, 2021. Subsections 92.1(c) and 94.1.1(a) require that the control measures and stabilization standards therein be made enforceable by the terms and conditions of the stationary source permit.

The source’s operating permit has been revised to include the fugitive dust emission limits and control requirements.

#### Minor Revision Application, Received 03/08/2021

The following EU additions, modifications, removals, and administrative changes are provided for the following source categories:

- Storage Tanks/Fuel Loading Racks/Fuel Dispensing
  - Removal of all aviation gasoline storage tanks and loading operations EUs J008, J009, J010, J015, and J017
  - J008, J009, J015 will be converted to diesel services, and now are classified as insignificant activities
  - Insignificant activities tank/loading rack list has addition of new tanks, removal of existing tanks, reclassification of existing tank, and administrative changes to several tanks and/or loading racks. Calculations for these changes were provided by the source.

- Internal Combustion
  - Changes to engines consisted of administrative updates to several EUs:
    - G016: generator manufacturer from Onan to Cummins
    - G003: building number to 83
    - G005: generator manufacturer from Onan to Cummins
    - G004: generator manufacturer from Onan to Cummins
    - G148: engine serial number to 73196899
    - G141: building number to 625 and engine manufacturer from Perkins to Caterpillar
    - G151: fire pump model number to JW6H-UFADF0
    - G152: fire pump model number to JW6H-UFADF0
    - G164: building number to new building near 1003 and generator serial number to H190619133
    - G118: genset serial number to X10F240858 and engine serial number to 75702-799
    - G136: building number to 1011
    - G123: generator manufacturer from Onan to Cummins
    - G026: fire pump serial number to 44769110 and removal of G028.
- Abrasive Blasting (Insignificant Activity)
  - Removed media blaster from building 719
- Degreasers (Insignificant Activity)
  - Replaced degreaser in building 52
  - Removed degreaser in building 719
  - Updated serial number of degreaser in building 225 to 10434160-100212
  - Updated model number of degreaser in building 3953 to 28-1.

Minor Revision Application, Received 05/03/2021

The following EU additions, modifications, removals, and administrative changes are provided for the following source categories:

- Internal Combustion
  - Addition of a new 208 hp engine (EU: G166).

Minor Revision Application received 07/12/2021

The following EU additions, modifications, removals, and administrative changes are provided for the following source categories:

- Internal Combustion
  - Addition of a new 755 hp engine (EU: G167).

**D. ALTERNATIVE OPERATING SCENARIO**

None proposed.



## E. DESCRIPTION OF PROCESS

The mission of Creech Air Force Base is to prepare Air Force personnel to participate in military activities around the world. The ground-based facilities at Creech AFB provide for the instruction of combat pilots who operate unmanned aircraft. Military personnel, aircraft, and associated support equipment must be in a continuous state of combat readiness for immediate deployment whenever and wherever needed. Activities include, but are not limited to, aerial gunnery training, rocketry, electronic warfare, tactical maneuvering and air support, and equipment and tactics development and testing. The NTTR is also referred to as the Southern Ranges and includes the Point Bravo facilities and Range 63C (Silver Flag Alpha Ground Combat Training Area).

In order to accurately quantify and document pollutant emission rates, various source categories have been identified. Each source category represents a subset of common emission units. The source categories are as follows:

1. **Storage Tanks/Fuel Dispensing/Fuel Loading:** This category encompasses all types of fuel that is consumed by the Base (general automotive gasoline, aviation gasoline, diesel, and jet fuels). The calculated PTE from this category includes emissions from storage tanks as well as for fuel dispensing activities.
2. **External Combustion:** This category includes boilers, water heaters, and furnaces that generate heat, steam, and hot water to support various industrial, institutional, or commercial activities. All of the external combustion emission units are now operating on propane. The two propane-fired spray booth heaters, used for the surface coating operation, are also included in this category. A natural gas source has not been established in, or near, the township of Indian Springs.
3. **Internal Combustion:** This category consists of stationary internal combustion engines that are used to power electric generators, fire pumps, aerospace ground equipment, and a variety of activities on the NTTR. The generators are divided between those used to provide electricity to areas where grid power is not available and those used solely for emergency purposes. The diesel engine that powers the portable crushing unit, used for the mineral processing operation, is included in this category. All engines are operated on diesel fuel.
4. **Mineral Processing:** The NTTR operates multiple gravel sites throughout the range complex. The equipment is capable of producing a wide range of aggregate products, but the most common product is Type II aggregate used for road base and target construction. The permitted emission unit is portable, and may be used anywhere within the NTTR which covers three different counties. For purposes of this OP, the crusher is permitted, and the PTE is calculated, only for those operations that take place within Clark County.
5. **Surface Coating:** Surface coating operations at Creech AFB are performed in two spray booths at the facility. The paint booth located at Building 230 is used for painting of vehicles and miscellaneous parts. The paint booth at Bldg. 1004 is used for painting composite materials which comprise the body components of the unmanned aircraft.
6. **Miscellaneous Chemical Usage:** Any miscellaneous VOC and HAP containing operation except the surface coating operations are captured in this process.
7. **Woodworking:** Woodworking activities that occur at Creech are minimal and are restricted to one building on the Base. Woodworking activities are considered insignificant.

8. **Degreasers:** Degreasers are used to remove lubricants, greases, and other unwanted materials from metal parts before servicing, surface coating, or installing into equipment. All of the degreasers are cold cleaner units which consist of an area to spray, brush, flush or immerse the metal parts to be cleaned with the solvent. For permitting purposes, this process is considered an insignificant activity.
9. **Fuel Cell Maintenance:** Each unmanned aircraft is equipped with four separate fuel cells. Maintenance and repair of these cells is part of scheduled maintenance for the aircraft. A fuel-purging process is required before any repairs can be made. For permitting purposes, this process is considered an insignificant activity.
10. **Blasting:** Media blasting units that are used for cleaning of small parts. For permitting purposes, this process is considered an insignificant activity.

### III. EMISSION UNITS AND SOURCEWIDE PTE

#### A. EMISSION UNITS

The emission units listed cover the changes in the tables below:

**Table III-A-1: Tanks**

EU	Description	Capacity (gallons)	Fuel	Location	SCC
J001	Aboveground Storage Tank	5,000	Gasoline	Building 687	40600302
J002	Aboveground Storage Tank	10,000	Gasoline	Building 688	40600302

**Table III-A-2: Loading Arms**

EU	Description	Fuel	Location	SCC
J014	Two (2) Loading Arms (one loading; one unloading)	Gasoline	Building 691	40600702

**Table III-A-3: Internal Combustion Units**

EU	Description	Manufacturer	Rating	Model #	Serial #	Location	SCC
G003 <sup>M</sup>	Genset – Emergency	Onan	80 kW	DGDA-5627785	G030520964	Bldg. 83	20200102
	Engine – Diesel; DOM: 07/2003	Cummins	170 hp	6BT5.9-G6	46320778		
G004 <sup>M</sup>	Genset – Emergency	Cummins	150 kW	DGFA-5690291	H040680602	Bldg. 93	20200102
	Engine – Diesel; DOM: 08/2004		277 hp	6CTA8.3-G2	46419106		
G005 <sup>M</sup>	Genset – Emergency	Cummins	125 kW	DSGAB-7514940	L080224037	Bldg. 89	20200102
	Engine – Diesel; DOM: 11/2008		250 hp	QSB7-G3NR3	46964168		
G006	Genset – Emergency	Onan	60 kw	DSFAD-2710150	A100080581	Bldg. 1217	20200102
	DOM: 2009	Cummins	145 hp	QSB5-G3NR3	73051603		
G013	Genset – Emergency	Cummins	150 kW	DSHAA-5754455	C060894365	Bldg. 707	20200102
	Engine – Diesel; DOM: 02/2006		364 hp	QSL9-G2	46584119		
G014	Genset – Emergency	Cummins	300 kW	DQHAB-5940835	K070135033	Bldg. 718	20200102
	Engine – Diesel; DOM: 11/2007		470 hp	QSM11-G4NR3	35212610		
G015	Genset – Emergency	Caterpillar	400 kW	LC6	G6B00485	Bldg. 718	20200102
	Engine – Diesel; DOM: 2005		610 hp	3456	7WG02944		

EU	Description	Manufacturer	Rating	Model #	Serial #	Location	SCC
G016 <sup>M</sup>	Genset – Emergency	Cummins	350 kW	DFEG-6151105	A080149168	Bldg. 64	20200102
	Engine – Diesel; DOM: 10/2007		755 hp	QSX15-G9	79276400		
G017	Genset – Emergency	Cummins	750 kW	DQFAA-2427029	L090075224	Bldg. 718	20200102
	Engine – Diesel; 2010 EPA standards		1,490 hp	QST30-G5	37242049		
G019	Genset – Emergency	Cummins	300 kW	DFCB-5694768	K040711736	Bldg. 1001	20200102
	Engine – Diesel; DOM: 9/2004		465 hp	NTA-855-G2	30371581		
G020	Fire Pump	Clarke	207 hp	JU6H-UFMO		Bldg. 1001	20200102
	Engine – Diesel; DOM: 02/2006	John Deere		6068TF220	PE6068T546292		
G021	Fire Pump	Clarke	207 hp	JU6H-UFMO		Bldg. 1001	20200102
	Engine – Diesel; DOM: 2/2006	John Deere		6068TF220	PE6068T547193		
G022	Fire Pump	Clarke	207 hp	JU6H-UFMO		Bldg. 1001	20200102
	Engine – Diesel; DOM: 02/2006	John Deere		6068TF220	PE6068T547200		
G025	Fire Pump	Clarke	51 hp	JU4H-UF10		Bldg. 2417	20200102
	Engine – Diesel; DOM: 2007	John Deere		4045DFR120	PE4045D660770		
G026 <sup>M</sup>	Fire Pump	Cummins	130 hp			Bldg. 3922	20200102
	Engine – Diesel; DOM: 1992			6BTA5.9F2	44769110		
G027	Genset – Emergency	Cummins	125 kW	DGDK-5784942	A070007980	Bldg. 3951	20200102
	Engine – Diesel; DOM: 08/2006		207 hp	6BTAA5.9-G1	46656629		
G057	Genset – Emergency	Onan	1,750 kW	DQKAA-5936750	J070113763	Bldg. 1005	20200102
	Engine – Diesel DOM: 9/2007	Cummins	2,953 hp	QSKTA60-GE	33170322		
G058	Genset – Emergency	Generac	36 kW	5263390100	2082896	Bldg. 222	20200102
	Engine – Diesel; DOM: 2004	John Deere	48 hp	4024TF270D	PE4024T030746		
G117	Genset – Emergency	Cummins	300 kW	DQHAB-2321029	K090067670	Bldg. 85	20200102
	Engine – Diesel; DOM: 10/2009		470 hp	QSM11-G4NR3	35260722		
G118 <sup>M</sup>	Genset – Emergency	Cummins	1,500 kW	DQGAB-4902071	X10F240858	Bldg. 1009	20200102
	Engine – Diesel; DOM: 2010		2,220 hp	QSK50-G4	75702-799		
G123 <sup>M</sup>	Genset – Emergency	Cummins	125 kW	DSGAB-4507043	D100116376	Bldg. 1052	20200102
	Engine – Diesel; DOM: 4/2010		250 hp	QSB7-G3NR3	73089655		
G124	Genset – Emergency	Caterpillar	100 kW	D100-6	CAT00C44ED4B 01775	Bldg. 820	20200102
	Engine – Diesel; DOM: 2010		157 hp	C4.4	E5M01931		

EU	Description	Manufacturer	Rating	Model #	Serial #	Location	SCC
G127	Genset – Emergency	Cummins	150 kW	DSHAA-6174070	A080147422	Bldg. 1000	20200102
	Engine – Diesel; DOM: 11/2007		364 hp	QSL9-G2-NR3	21814024		
G130	Fire Pump	Clarke	175 hp	JU6H-UFM8		Bldg. 120	20200102
	Engine – Diesel; DOM: 7/2008	John Deere		6068TF220	PE6068T733372		20200102
G131	Fire Pump	Clarke	175 hp	JU6H-UFM8		Bldg. 120	20200102
	Engine – Diesel; DOM: 7/2008	John Deere		6068TF220	PE6068T733460		20200102
G133	Fire Pump	Clarke	183 hp	JU6H-UF58		Bldg. 719	20200102
	Engine – Diesel; DOM: 2007	John Deere		6068TF220	PE6068T665693		
G134	Fire Pump	Clarke	183 hp	JU6H-UF58		Bldg. 719	20200102
	Engine – Diesel; DOM: 2007	John Deere		6068TF220	PE6068T665699		
G136 <sup>M</sup>	Genset – Emergency	Cummins	350 kW	DFEG-6195497	L100178507	Bldg. 1011	20200102
	Engine – Diesel; DOM: 12/2010		755 hp	QSX15-G9	79452962		
G137	Genset – Emergency	Cummins	125kW	DSHAE-6748751	A080152619	Bldg. 1019	20200102
	Engine – Diesel; DOM: 01/2008		364 hp	QSL9-G2NR3	46852086		
G138	Genset – Emergency	Cummins	300 kW	DQHAB-7235958	I080206592	Bldg. 1022	20200102
	Engine – Diesel; DOM: 08/2008		470 hp	QSM11-G4NR3	35238399		
G139	Genset – Emergency	Cummins	35 kW	DGGD-5628067	G030523428	Bldg. 1078	20200102
	Engine – Diesel; DOM: 2003		56 hp	B3.3G1	68013985		
G140	Genset – Emergency	Onan	35 kW	DGBB-5689864	H040679901	Bldg. 1050	20200102
	Engine – Diesel; DOM: 2004	Cummins	68 hp	4B3.9-G2	46418681		
G141 <sup>M</sup>	Genset – Emergency	Caterpillar	13 kW	D13-4	CAT00000CGBD 00299	Bldg. 625	20200102
	Engine – Diesel; DOM: 07/2011		20 hp	C1.5	E4F00295		
G142	Genset – Emergency	Cummins	200 kW	DSHAC-5770629	H060964339	Bldg. 1210	20200102
	Engine – Diesel; DOM: 07/2006		364 hp	QSL9-G2	46646741		
G143	Genset – Emergency	Cummins	35 kW	DGGD-5962267	A080142386	Bldg. 3925	20200102
	Engine – Diesel; DOM: 10/2007		81 hp	4BT3.3-G6NR	68088456		
G145	Genset – Emergency	Cummins	7.5 kW	DNAC-5664495	B048598967	Bldg. 1000	20200102
	Engine – Diesel; DOM: 2004	Onan	14 hp	LPW2	03020639		
G148 <sup>M</sup>	Genset – Emergency	Cummins	100 kW	DSGAA-6657732	B110192988	Bldg. 104	20200102
	Engine – Diesel; DOM: 2/2011		250 hp	QSB7-G3NR3	73196899		
G149	Genset – Emergency	Cummins	250 kW	DQDAA-8362897	K110268075	Bldg. 1000	20200102
	Engine – Diesel; DOM: 9/2011		399 hp	QSL9-G3NR3	7330516		

EU	Description	Manufacturer	Rating	Model #	Serial #	Location	SCC
G150	Genset – Emergency	Cummins	80 kW	DSFAE-1201483	D120322250	Bldg. 1004	20200102
	Engine – Diesel; DOM: 3/2012		145 hp	QSB5-G3NR3	73377600		
G151 <sup>M</sup>	Fire Pump	Clarke	311 hp	JW6H-UFADF0	RG6090L100155	Bldg. 799	20200102
	Engine – Diesel; DOM: 2010	John Deere		6090HFC47AB			
G152 <sup>M</sup>	Fire Pump	Clarke	311 hp	JW6H-UFADF0	RG6090L100152	Bldg. 799	20200102
	Engine – Diesel; DOM: 2010	John Deere		6090HFC47AB			
G153	Genset – Emergency	Cummins	80 kW	DSFAE-7563802	A090228444	Bldg. 2265	20200102
	Engine – Diesel; DOM: 2009		145 hp	QSB5-G3NR3	46975118		
G154	Genset – Emergency	Cummins	80 kW	DSFAE-7591952	B090231997	Bldg. 2265	20200102
	Engine – Diesel; DOM: 2009		145 hp	QSB5-G3NR3	46979136		
G156	Genset – Emergency	MTU Onsite Energy	900 kW	900-RXC6DT2	357380-1-1-0313	Bldg. 1055	20200102
	Engine – Diesel; DOM: 3/2013	MTU-DD Detroit Diesel	1,354 hp	16V2000G45TB	5362010743		
G157	Genset – Emergency	Cummins	40 kW	DGHCC-1322028	B130462367	Bldg. 1033	20200102
	Engine – Diesel; DOM: 2012		69 hp	4BT3.3-G5	72007652		
G158	Genset – Emergency	Cummins	200 kW	DSGAE-1336099	H130555078	Bldg. 1150	20200102
	Engine – Diesel; DOM: 8/2013		324 hp	QSB7-G5-NR3	73568652		
G159	Genset – Emergency	Cummins	1,250 kW	DQGAA-1217643	A130438099	Bldg. 1130	20200102
	Engine – Diesel; DOM: 10/2012		2,220 hp	QSK50-G4	25383751		
G162	Genset – Emergency	Cummins	300 kW	DQHAB-1527253	K150889886	Bldg. 703	20200102
	Engine – Diesel DOM: 10/2015		470 hp	QSM11-G4NR3	35335608		
G163	Genset – Emergency	Cummins	20 kW	C20 D6	A170142502	Bldg. 1003	20200102
	Engine – Diesel; DOM: 2017	Kubota	36 hp	V2203M-BG-ET02	7GA3781		
G164 <sup>M</sup>	Genset – Emergency	Cummins	600 kW	DQCA-1995210	H190619133	New Bldg near 1003	20200102
	Engine – Diesel; DOM: 06/2019		1,220 hp	QSK23-G7	85006244		
G165	Genset – Emergency	Cummins	30 kw	C30D6	TBD	Bldg. 2265	20200102
	Engine – Diesel; DOM: 2020		69 hp	4BT3.3-G5	TBD		
G166 <sup>N</sup>	Genset – Emergency	Cummins	125 kW	C125D6C-1870134	L180463376	Bldg. 93	20200102
	Engine – Diesel; DOM: 2018		208 hp	QSB5-G6	74421187		
G167 <sup>N</sup>	Genset – Emergency	Cummins	450 kW	DEFJ	TBD	Bldg. 279	20200102
	Engine – Diesel; DOM: 2020		755 kW	QSX15-G9	TBD		

EU	Description	Manufacturer	Rating	Model #	Serial #	Location	SCC
NTTR1	100 Continuous Duty Generators not to exceed 600 hp – limited to 280,000 gallons of diesel fuel per year	DOM 01/01/2015	600 hp	Various	Various	NTTR	20200102
NTTR2	100 Continuous Duty Generators not to exceed 600 hp – limited to 10,000 gallons of diesel fuel per year	DOM 01/01/2015	< 600 hp; > 1000 hp	Various	Various	NTTR	20200102

<sup>1</sup>New.<sup>2</sup>Administrative modification, such as change of manufacture name, serial number, or model number.**Table III-A-4: Aggregate Plant**

EU	Description	Model #	Serial #	SCC
A001	Material Transfer: Loader to Hopper			30502599
	Hopper to Crusher			
A003	Portable Self-Contained Mineral Processing Unit - Hopper, Crusher, Screen with 5 conveyors – 250 tons per hour	Ultra-Max 1200-25CC	22778X	30502510
A003a	Stacker (Front Extended)			30502505
A003b	Stacker (Side Extended)			30502505
A015	Storage Piles - 2.0 acres			30502507
A016	Haul Road; Unpaved; Round Trip = 8.0 miles			30502504
A017	Truck Loading			30502599
B001 <sup>1</sup>	Detroit Diesel; Diesel powered Generator; 500 hp	60.12.7L	06R0860142	20200102

<sup>1</sup>Note: The emissions from B001 will be incorporated in the "Internal Combustion Unit" section of the permit with all the other engines. All applicable requirements for B001 will be incorporated in the Mineral Processing Section of the permit with the associated rock crushing equipment in which it operates.

The following units or activities listed in the tables III-A-5, III-A-6, and III-A-7 are present and revised at this source, but are deemed insignificant.

**Table III-A-5: Insignificant Activities – Tanks/Loading Racks**

Building Number	Description	Capacity (gal)	Fuel	Throughput (gal/year)
<b>Insignificant Jet Fuel Tanks</b>				
121	AST	1,000	Jet Fuel	365,000
553	AST	1,000	Jet Fuel	365,000
626	AST	120	Jet Fuel	43,800
667	AST	30,000	Jet Fuel	2,000,000
668	AST	26,496	Jet Fuel	2,000,000
669	AST	26,496	Jet Fuel	2,000,000
1011	AST	400	Jet Fuel	146,000
1011	AST	400	Jet Fuel	146,000
<b>Insignificant Jet Fuel Loading Racks and Fuel Dispensing</b>				

Building Number	Description	Capacity (gal)	Fuel	Throughput (gal/year)
121	Loading Arms (one loading; one unloading)	NA	Jet Fuel	2,000,000
682	Loading Arms (one loading; one unloading)	NA	Jet Fuel	2,000,000
1011	Loading Arms (one loading; one unloading)	NA	Jet Fuel	500,000
<b>Insignificant Waste Fuel Tanks</b>				
255-2	AST	5,000	Jet Fuel	1,825,000
<b>Insignificant Diesel Tanks</b>				
64	AST	1,500	Diesel	547,500
83	AST	127	Diesel	46,355
85	AST	1,700	Diesel	620,500
89	AST	308	Diesel	112,420
93	AST	25	Diesel	9,125
104	AST	500	Diesel	182,500
120	AST	240	Diesel	87,600
120	AST	240	Diesel	87,600
222	AST	100	Diesel	36,500
660	AST	5,000	Diesel	150,000
681	AST	5,000	Diesel	150,000
685	AST	5,000	Diesel	1,825,000
686	AST	5,000	Diesel	1,825,000
703	AST	1,700	Diesel	620,500
707	AST	366	Diesel	133,590
718	AST	1,000	Diesel	365,000
718-1	AST	2,000	Diesel	730,000
718-A	AST	4,000	Diesel	1,460,000
719	AST	240	Diesel	87,600
719	AST	240	Diesel	87,600
799	AST	350	Diesel	127,750
799	AST	350	Diesel	127,750
820	AST	650	Diesel	237,250
1000	AST	2,070	Diesel	755,550
1000	AST	50	Diesel	18,250
1001	AST	240	Diesel	87,600
1001	AST	240	Diesel	87,600
1001	AST	240	Diesel	87,600
1001	AST	500	Diesel	182,500
1003	AST	195	Diesel	71,175
1003	AST	79	Diesel	28,835

Building Number	Description	Capacity (gal)	Fuel	Throughput (gal/year)
1004	AST	559	Diesel	204,035
1005	AST	1,808	Diesel	659,920
1005	AST	8,000	Diesel	2,920,000
1006	AST	5,000	Diesel	1,825,000
1009	AST	1,575	Diesel	574,875
1011	AST	2,070	Diesel	755,550
1019	AST	366	Diesel	133,590
1022	AST	600	Diesel	219,000
1033	AST	195	Diesel	71,175
1050	AST	145	Diesel	52,925
1052	AST	308	Diesel	112,420
1055	AST	4,615	Diesel	1,684,475
1078	AST	500	Diesel	182,500
1130	AST	1,280	Diesel	467,200
1130	AST	10,000	Diesel	3,650,000
1150	AST	1,161	Diesel	423,765
1210	AST	500	Diesel	182,500
1217	AST	150	Diesel	54,750
2417	AST	300	Diesel	109,500
3922	AST	150	Diesel	54,750
3925	AST	140	Diesel	51,100
3951	AST	127	Diesel	46,355
Box Canyon	AST	500	Diesel	182,500
Box Canyon	AST	250	Diesel	91,250
Point Bravo	AST	1,000	Diesel	365,000
Range - U2762B	AST	275	Diesel	100,375
Range - 630	AST	500	Diesel	182,500
Range - 62 Power PI	AST	250	Diesel	91,250
Range	AST	250	Diesel	91,250
Range	AST	250	Diesel	91,250
Range	AST	250	Diesel	91,250
Range	AST	250	Diesel	91,250
Range	AST	250	Diesel	91,250
Range	AST	500	Diesel	182,500
Range	AST	500	Diesel	182,500
Range 63-A	AST	500	Diesel	182,500
Range 63-A CV20	AST	500	Diesel	182,500
Range 63-A UMTE	AST	250	Diesel	91,250



Building Number	Description	Capacity (gal)	Fuel	Throughput (gal/year)
Range 63-B (Center Watch Tower)	AST	500	Diesel	182,500
Range 63-B (NAVAIR)	AST	500	Diesel	182,500
Range 63-B (Pad 3)	AST	1,000	Diesel	365,000
Range 63-B (Pad 4)	AST	1,000	Diesel	365,000
RANGE 64-C (NORTH TOWER)	AST	500	Diesel	182,500
Range 64-E	AST	500	Diesel	182,500
Silver Flag Alpha	AST	100	Diesel	36,500
UO5	AST	500	Diesel	182,500
NEW BUILDING (NEAR 1003)	AST	2,460	Diesel	897,900
<b>Insignificant Diesel Loading Racks and Fuel Dispensing</b>				
661	Single Product Dispensing Nozzles (4)	NA	Diesel	1,000,000
692	Loading Arms (two loading; two unloading)	NA	Diesel	150,000

**Table III-A-6: Insignificant Activities – Abrasive Blasting**

Location	Description	Manufacturer	Model #	Serial #
Bldg. 227	Media Blasting Booth; 10.0' x 25" x 65"	Custom-Made		
Bldg. 227	Media Blasting Booth; 5.0' x 4.0' x 4.0'	Custom-Made		
Bldg. 791	Media Blasting Booth; 5.0' x 4.0' x 3.0'	Pauli Systems	RAM 35-ACGIH	11531
Bldg. 2284	Media Blasting Booth; 5.0' x 4.0' x 4.0'	Abrasive Blasting Systems	MIL-B-83756C	300902-02-2

**Table III-A-7: Insignificant Activities – Degreasers**

Location	Description	Manufacturer	Model #	Serial #
Bldg. 52	Parts Washing Unit; 25 Gallons	Spray Master	SM9400	19099187
Bldg. 115	Parts Washing Unit; 17.5 Gallons	Clarus	PCS-15	
Bldg. 225	Parts Washing Unit; 27.5 Gallons	Clarus	PCS-25	5569
Bldg. 225	Parts Washing Unit; Non-VOC solvent	CUDA	H20-2840	10434160-100212
Bldg. 279	Parts Washing Unit; 85 Gallons	Aladin	2085E	71533
Bldg. 1011	Parts Washing Unit; 30 Gallons	Smart washer	28	2106049
Bldg. 3953	Parts Washing Unit; 25 Gallons	Power Master-Kleen Tec	28-1	02145

## B. EXEMPTIONS

The following units or activities are exempt and will be maintained on-site:

- Aircraft Arrestors: A letter issued to Creech dated June 13, 2014, granted an exemption under the National Security Exemption for these engines.
- DoD engines.
- Non-road engines.

## C. SOURCE-WIDE PTE

Creech AFB is a major Title V source for NO<sub>x</sub> and a minor source for all other air pollutants including GHG.

**Table III-C-1: Source-wide PTE (tons per year)**

PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAPs	GHG <sup>1</sup>
20.22	11.95	193.80	48.82	0.92	36.88	9.47	37,014.94

<sup>1</sup>Metric tons per year

## D. SOURCE APPLICABILITY/STATUS DETERMINATION EMISSIONS

**Table III-D-1: Applicability/Source Determination PTE (tons per year)**

Activity	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAPs	H <sub>2</sub> S	Pb	GHG
Storage Tanks/Loading Arms/Fuel Dispensing	0	0	0	0	0	10.32	1.59	0	0	0
External Combustion Units	1.47	1.47	26.85	15.53	0.14	2.06	0.14	0	0	26,207.00
Internal Combustion Units	9.44	9.44	182.87	33.49	0.80	17.10	0.67	0	0	10,807.94
Mineral Processing	21.79	3.87	0	0	0	0	0	0	0	0
Surface Coating	0	0	0	0	0	6.60	4.62	0	0	0
Miscellaneous Chemical Usage	0	0	0	0	0	5.00	2.5	0	0	0
<b>Subtotal:</b>	<b>32.70</b>	<b>14.78</b>	<b>209.72</b>	<b>49.02</b>	<b>0.94</b>	<b>41.08</b>	<b>9.52</b>	<b>0</b>	<b>0</b>	<b>37,014.94</b>
<b>Insignificant Activities<sup>1</sup></b>										
Diesel Storage Tanks/Loading Racks/Fuel Dispensing	0	0	0	0	0	1.14	0.06	0	0	0
Abrasive Blasting	0.01	0.01	0	0	0	0	0	0	0	0
Degreasers	0	0	0	0	0	0.41	0	0	0	0
Woodworking	0.44	0.33	0	0	0	0	0	0	0	0
Fuel Cell Maintenance	0	0	0	0	0	0.01	0.01	0	0	0
<b>Subtotal:</b>	<b>0.45</b>	<b>0.34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.56</b>	<b>0.07</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total:</b>	<b>33.15</b>	<b>15.12</b>	<b>209.72</b>	<b>49.02</b>	<b>0.94</b>	<b>42.64</b>	<b>9.59</b>	<b>0</b>	<b>0</b>	<b>37,014.94</b>

<sup>1</sup>The emissions from insignificant activities are not included in the PTE. There are no regulatory requirements for these units.

## E. ALLOWABLE EMISSIONS

The following tables summarize the Allowable PTE:

**Table III-E-1: PTE by Process (tons per year)**

Activity	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAPs	H <sub>2</sub> S	Pb	GHG
Storage Tanks/Loading Arms/ Fuel Dispensing	0	0	0	0	0	10.32	1.59	0	0	0
External Combustion Units	1.47	1.47	26.85	15.53	0.14	2.06	0.14	0	0	26,207.00
Internal Combustion Units	8.94	8.94	166.95	33.29	0.78	12.90	0.62	0	0	10,807.94
Mineral Processing	9.81	1.54	0	0	0	0	0	0	0	0
Surface Coating	0	0	0	0	0	6.60	4.62	0	0	0
Miscellaneous Chemical Usage	0	0	0	0	0	5.00	2.50	0	0	0
<b>Total:</b>	<b>20.22</b>	<b>11.95</b>	<b>193.80</b>	<b>48.82</b>	<b>0.92</b>	<b>36.88</b>	<b>9.47</b>	<b>0</b>	<b>0</b>	<b>37,014.94</b>

**Table III-E-2: Tanks/Loading Arms (tons/year)**

EU	Building #	Description	Fuel	Capacity (gallons)	Throughput (gallons/year)	VOC PTE	HAP PTE
Tanks							
J001	687	Horizontal Fixed Roof AST/Rectangular	Gasoline	5,000	3,640,000	7.64	0.40
J002	688	Horizontal Fixed Roof AST/Rectangular	Gasoline	10,000			
Loading Arms							
J014	691	Loading Arms (one loading; one unloading)	Gasoline	N/A	500,000	2.68	1.19
Total:						10.32	1.59

**Table III-E-3: Internal Combustion (tons per year)**

EU	Rating	Condition	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAP	GHG
G003	170 hp	500 hours/year	0.09	0.09	1.32	0.28	0.01	0.11	0.01	48.88
G004	277 hp	500 hours/year	0.15	0.15	2.15	0.46	0.01	0.17	0.01	79.64
G005	250 hp	500 hours/year	0.01	0.01	0.41	0.05	0.02	0.01	0.01	71.88
G006	145 hp	500 hours/year	0.01	0.01	0.19	0.04	0.01	0.01	0.01	41.69
G013	364 hp	500 hours/year	0.20	0.20	2.82	0.61	0.01	0.23	0.01	104.65
G014	470 hp	500 hours/year	0.01	0.01	0.67	0.02	0.01	0.02	0.01	135.13
G015	610 hp	500 hours/year	0.11	0.11	3.66	0.84	0.01	0.11	0.01	176.90
G016	755 hp	500 hours/year	0.02	0.02	1.80	0.12	0.01	0.12	0.01	218.95
G017	1,490 hp	500 hours/year	0.10	0.10	3.26	0.38	0.01	0.07	0.01	432.10
G019	465 hp	500 hours/year	0.26	0.26	3.60	0.78	0.01	0.29	0.01	133.69
G020	207 hp	500 hours/year	0.11	0.11	1.60	0.35	0.01	0.13	0.01	59.51
G021	207 hp	500 hours/year	0.11	0.11	1.60	0.35	0.01	0.13	0.01	59.51
G022	207 hp	500 hours/year	0.11	0.11	1.60	0.35	0.01	0.13	0.01	59.51
G025	51 hp	500 hours/year	0.01	0.01	0.13	0.05	0.01	0.02	0.01	14.66
G026	130 hp	500 hours/year	0.07	0.07	1.01	0.22	0.01	0.08	0.01	37.38
G027	207 hp	500 hours/year	0.06	0.06	0.78	0.26	0.01	0.02	0.01	59.51

EU	Rating	Condition	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAP	GHG
G057	2,953 hp	500 hours/year	0.03	0.03	9.44	0.62	0.18	0.15	0.01	856.37
G058	48 hp	500 hours/year	0.03	0.03	0.37	0.08	0.01	0.03	0.01	13.80
G117	470 hp	500 hours/year	0.01	0.01	0.67	0.02	0.01	0.02	0.01	135.13
G118	2,220 hp	500 hours/year	0.07	0.07	5.28	1.09	0.01	0.28	0.01	643.80
G123	250 hp	500 hours/year	0.01	0.01	0.41	0.05	0.02	0.01	0.01	71.88
G124	157 hp	500 hours/year	0.01	0.01	0.24	0.07	0.01	0.10	0.01	45.07
G127	364 hp	500 hours/year	0.03	0.03	0.60	0.52	0.01	0.23	0.01	104.65
G130	175 hp	500 hours/year	0.10	0.10	1.36	0.29	0.01	0.11	0.01	50.31
G131	175 hp	500 hours/year	0.10	0.10	1.36	0.29	0.01	0.11	0.01	50.31
G133	183 hp	500 hours/year	0.10	0.10	1.42	0.31	0.01	0.12	0.01	52.61
G134	183 hp	500 hours/year	0.10	0.10	1.42	0.31	0.01	0.12	0.01	52.61
G136	755 hp	500 hours/year	0.04	0.04	1.21	0.28	0.01	0.03	0.01	218.95
G137	364 hp	500 hours/year	0.03	0.03	0.60	0.52	0.01	0.23	0.01	104.65
G138	470 hp	500 hours/year	0.01	0.01	0.67	0.02	0.01	0.02	0.01	135.13
G139	56 hp	500 hours/year	0.03	0.03	0.43	0.09	0.01	0.04	0.01	16.10
G140	68 hp	500 hours/year	0.04	0.04	0.53	0.11	0.01	0.04	0.01	19.55
G141	20 hp	500 hours/year	0.01	0.01	0.07	0.02	0.01	0.01	0.01	5.75
G142	364 hp	500 hours/year	0.01	0.01	1.22	0.05	0.01	0.02	0.01	104.65
G143	81 hp	500 hours/year	0.01	0.01	0.18	0.02	0.01	0.02	0.01	23.29
G145	14 hp	500 hours/year	0.01	0.01	0.11	0.01	0.01	0.01	0.01	4.03
G148	250 hp	500 hours/year	0.01	0.01	0.28	0.07	0.02	0.01	0.01	71.88
G149	399 hp	500 hours/year	0.02	0.02	0.59	0.38	0.01	0.03	0.01	114.71
G150	145 hp	500 hours/year	0.01	0.01	0.23	0.03	0.01	0.01	0.01	41.69
G151	311 hp	500 hours/year	0.02	0.02	0.45	0.14	0.01	0.02	0.01	89.41
G152	311 hp	500 hours/year	0.02	0.02	0.45	0.14	0.01	0.02	0.01	89.41
G153	145 hp	500 hours/year	0.01	0.01	0.23	0.03	0.01	0.01	0.01	41.69
G154	145 hp	500 hours/year	0.01	0.01	0.23	0.03	0.01	0.01	0.01	41.69
G156	1,354 hp	500 hours/year	0.02	0.02	3.25	0.26	0.01	0.24	0.01	392.66
G157	69 hp	500 hours/year	0.01	0.01	0.13	0.06	0.01	0.04	0.01	19.84
G158	324 hp	500 hours/year	0.03	0.03	0.54	0.35	0.01	0.20	0.01	93.15
G159	2,220 hp	500 hours/year	0.07	0.07	5.28	1.09	0.01	0.28	0.01	643.80
G162	470 hp	500 hours/year	0.01	0.01	0.67	0.02	0.01	0.02	0.01	135.13
G163	36 hp	500 hours/year	0.01	0.01	0.04	0.01	0.01	0.01	0.01	10.36
G164	1,220 hp	500 hours/year	0.05	0.05	2.89	0.27	0.01	0.22	0.01	353.80
G165	69 hp	500 hours/year	0.01	0.01	0.11	0.06	0.01	0.04	0.01	19.84
G166	208 hp	500 hours/year	0.11	0.11	1.61	0.35	0.01	0.13	0.01	59.80
G167	755 hp	500 hours/year	0.01	0.01	2.14	0.17	0.01	0.03	0.01	218.95
B001	500 hp	2,080 hours/year	0.15	0.15	4.96	0.68	0.01	1.31	0.01	598.00
NTTR1	600 hp	280,000 gal/year	6.08	6.08	86.44	18.62	0.03	6.86	0.07	3,214.40
NTTR2	1,000 hp	10,000 gal/year	0.07	0.07	2.24	0.60	0.01	0.06	0.01	115.50
<b>Total:</b>			<b>8.94</b>	<b>8.94</b>	<b>166.95</b>	<b>33.29</b>	<b>0.78</b>	<b>12.90</b>	<b>0.62</b>	<b>10,807.94</b>

**Table III-E-4: Mineral Processing (tons per year)**

EU	Description	Condition	PM <sub>10</sub>	PM <sub>2.5</sub>
A001	Loading/Hopper		0.01	0.01
A003	Crusher	520,000	0.14	0.03
	Conveyor		0.01	0.01
	Screen		0.19	0.01
	Side Discharge Conveyor		0.01	0.01
	Front Discharge Conveyor		0.01	0.01
	Front Oversize Conveyor		0.01	0.01
	Discharge Conveyor		0.01	0.01
A003a	Stacker (Front Extend)		0.01	0.01
A003b	Stacker (Side Extend)		0.01	0.01
A017	Truck Loading		0.01	0.01
A015	Storage Piles - 2 Acres	2 Acres	0.61	0.09
A016	Unpaved Haul Roads	23,112 VMT	8.75	1.32
<b>Total:</b>			<b>9.81</b>	<b>1.54</b>

## IV. OPERATIONAL LIMITS, CONTROLS AND COMPLIANCE DEMONSTRATION

### A. OPERATIONAL LIMITS

#### Storage Tanks/Loading Arms/Fuel Dispensing:

- All operational limits remain in effect.

#### External Combustion Units:

- All operational limits remain in effect.

#### Internal Combustion Units:

- All operational limits remain in effect.

#### Mineral Processing:

- All operational limits remain in effect.

#### Surface Coating:

- All operational limits remain in effect.

#### Miscellaneous Chemicals:

- All operational limits remain in effect.

[illegible]

## **F. PUBLIC PARTICIPATION**

Pursuant to AQR 12.5.2.17, the Control Officer shall provide for public notice, comment, and an opportunity for a hearing on initial permit issuances, significant revisions, reopenings for cause, and renewals in accordance with the procedures outlined in the regulation. Given the broad range of changes that can be addressed through a reopening of the permit, DAQ relied on the other criteria for public participation to ascertain whether it should be initiated for this permitting action. As this action is neither an initial permit issuance nor a renewal of the Title V permit, the criteria for a significant permit revision was used to determine whether public participation is warranted. The changes addressed in this reopening of the permit do not meet any criterion for a significant revision that would otherwise require public participation. Instead, the changes addressed in this reopening impose a greater degree of stringency than was previously subject to public inspection. Therefore, initiation of another public participation process cannot be adequately supported.

## **V. REGULATORY REVIEW**

### **A. LOCAL REGULATORY REQUIREMENTS**

DAQ has determined that the following public law, statutes and associated regulations are applicable:

- Section 26, “Emission of Visible Air Contaminants”
- Section 40, “Prohibitions of Nuisance”
- Section 43, “Odors in the Ambient Air”
- Section 70, “Emergency Procedures”
- Section 80, “Circumvention”

### **B. FEDERALLY APPLICABLE REGULATIONS**

#### **40 CFR Part 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES:**

##### *Subpart A— General Provisions*

#### **40 CFR Part 60.7-Notification and record keeping**

**Discussion:** This regulation requires notification to Air Quality of modifications, opacity testing, records of malfunctions of process equipment and/or continuous monitoring device, and performance test data. These requirements are found in the Part 70 OP in Sections II-C and II-D. Air Quality requires records to be maintained for five years, a more stringent requirement than the two (2) years required by 40 CFR Part 60.7.

#### **40 CFR Part 60.8 - Performance tests**

**Discussion:** These requirements are found in the Part 70 OP in Section II-F. Notice of intent to test, the applicable test methods, acceptable test method operating conditions, and the requirement for three runs are outlined in this regulation. Air Quality requirements for initial performance testing are in accordance with CFR Part 60.8. Air Quality also requires periodic performance testing for compliance with the initial performance testing operating parameters.

##### *Subpart OOO—New Source Performance Standards for Nonmetallic Mineral Processing Plants*

**40 CFR Part 60.672 - Standard for particulate matter.**

**Discussion:** (b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under § 60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

**40 CFR Part 60.675 – Test methods and procedures.**

**Discussion:** (b) The owner or operator shall determine compliance with the PM standards in §60.672(a) as follows:

(2) Method 9 of appendix A-4 of this part and the procedures in § 60.11 shall be used to determine opacity.

(c)(1) In determining compliance with the particulate matter standards in § 60.672(b) or § 60.672(e)(1), the owner or operator shall use Method 9 of appendix A-4 of this part and the procedures in § 60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of appendix A-4 of this part, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

**40 CFR Part 60.676 – Reporting and recordkeeping.**

**Discussion:** (b)(1) Owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

*Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines***40 CFR Part 60.4200 – Applicability and designation of affected facility**

**Discussion:** EUs: G005, G006, G014, G016, G017, G025, G027, G057, G117, G118, G123, G124, G127, G130, G131, G133, G134, G136 G137, G138, G141, G142, G143, G145, G148, G149, G150, G151, G152, G153, G154, G156, G157, G158, G159, G162, G163, G164, G165, G166, and G167 are subject to this applicable subpart.

This source has provided the certifications for the continuous-duty diesel engines listed in the above paragraph that demonstrates compliance with 40 CFR Part 60, Subpart IIII.



The continuous-duty diesel engines have demonstrated compliance with the emission standards set forth in 40 CFR 89.112 for new nonroad IC engines for the same model year and maximum engine power. The emission standards are provided in Table V-B-1 and Table V-B-2:

**Table V-B-1: Emission Standards for Emergency Diesel Engines (g/kW-hr)**

EU	Engine Power	Year	NMHC + NO <sub>x</sub>	CO	PM	HC
G005	250 hp	2008	4.0	3.5	0.20	N/A
G006	145 hp	2009	4.0	5.0	0.30	N/A
G014	470 hp	2007	4.0	3.5	0.20	N/A
G016	755 hp	2007	6.4	3.5	0.20	N/A
G017	1,490 hp	2010	6.4	3.5	0.20	N/A
G027	207 hp	2006	4.0	3.5	0.20	N/A
G057	2,953 hp	2007	6.4	3.5	0.20	N/A
G117	470 hp	2009	4.0	3.5	0.20	N/A
G118	2,220 hp	2010	6.4	3.5	0.20	N/A
G123	250 hp	2010	4.0	3.5	0.20	N/A
G124	157 hp	2010	4.0	5.0	0.30	N/A
G127	364 hp	2007	4.0	3.5	0.20	N/A
G136	755 hp	2010	6.4	3.5	0.20	N/A
G137	364 hp	2008	4.0	3.5	0.20	N/A
G138	470 hp	2008	4.0	3.5	0.20	N/A
G141	20 hp	2011	7.5	6.6	0.40	N/A
G142	364 hp	2006	4.0	3.5	0.20	N/A
G143	81hp	2007	7.5	5.0	0.40	N/A
G148	250 hp	2011	4.0	3.5	0.20	N/A
G149	399 hp	2011	4.0	3.5	0.20	N/A
G150	145 hp	2012	4.0	5.0	0.30	N/A
G153	145 hp	2009	4.0	5.0	0.30	N/A
G154	145 hp	2009	4.0	5.0	0.30	N/A
G156	1,354 hp	2013	6.4	3.5	0.20	N/A
G157	69 hp	2012	4.7	5.0	0.30	N/A
G158	324 hp	2013	4.0	3.5	0.20	N/A
G159	2,220 hp	2012	6.4	3.5	0.20	N/A
G162	470 hp	2015	4.0	3.5	0.20	N/A
G163	36 hp	2017	7.5	5.5	0.60	N/A
G164	1,220 hp	2019	6.4	3.5	0.20	N/A
G165	69 hp	2020	4.7	5.0	0.40	N/A
G166	208 hp	2018	4.0	5.0	0.30	N/A
G167	755 hp	2020	6.4	3.5	0.20	N/A

**Table V-B-2: Emission Standards for Diesel-Powered Fire Pumps (g/hp-hr)**

EU	Engine Power	Year	NMHC + NO <sub>x</sub>	CO	PM
G025	51	2007	7.8	3.7	0.60
G130	175	2008	7.8	2.6	0.40
G131	175	2008	7.8	2.6	0.40
G133	183	2007	7.8	2.6	0.40
G134	183	2007	7.8	2.6	0.40
G151	311	2010	3.0		0.15
G152	311	2010	3.0		0.15

The continuous-duty diesel engines at this source are subject to 40 CFR Part 60, Subpart IIII, and so must meet the fuel requirements referenced therein from 40 CFR Subpart I, §80.510(b) for nonroad diesel fuel. The source must purchase diesel fuel that meets the per-gallon standard of 15 ppm maximum sulfur content, a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. As all refiners and importers of non-road diesel fuel are also subject to these federal standards pursuant to 40 CFR §80.510, it is reasonable to assume the operators of the engines have very little opportunity, if any, to acquire fuel that violates these standards. Therefore, the permittee is not being required by the operating permit to monitor or keep records of the sulfur content, cetane index, or aromatic content of the diesel fuel used in their continuous-duty diesel engine(s).

#### **40 CFR Part 60.4219 – Reporting and recordkeeping requirements.**

**Discussion:** As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in Subpart A of this part.

*Certified emissions life* means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

#### **40 CFR PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES:**

##### *Subpart A—General Provisions*

#### **40 CFR Part 63.4 – Prohibited activities and circumvention**

**Discussion:** This prohibition is addressed in the Part 70 OP. This is also local rule AQR Section 80.1.

##### *Subpart ZZZZ- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

#### **40 CFR Part 63.6585 – Am I subject to this subpart?**

**Discussion:** Creech AFB has a continuous-duty engine (EU: B001) and emergency engines/fire pumps (EUs: G003, G004, G013, G015, G019, G020, G021, G022, G026, G028, G058, G139, G140, G145) which are subject to this subpart.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

Each engine/fire pump at this source is subject to 40 CFR 63, Subpart ZZZZ, and so must meet the fuel requirements referenced therein from 40 CFR Subpart I, §80.510(b) for nonroad diesel fuel. The source must purchase diesel fuel that meets the per-gallon standard of 15 ppm maximum sulfur content, a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. As all refiners and importers of non-road diesel fuel are also subject to these federal standards pursuant to 40 CFR §80.510, it is reasonable to assume the operators of the engines have very little opportunity, if any, to acquire fuel that violates these standards. Therefore, the permittee is not being required by the operating permit to monitor or keep records of the sulfur content, cetane index, or aromatic content of the diesel fuel used in each diesel-fired engine/fire pump.

**40 CFR Part 63.6640—How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

**Discussion:** The continuous duty engine (EU: B001) must comply with the emission standard listed in in Table IV-B-3.

**Table V-B-3: Emission Standards for non-Emergency Diesel Engine**

Engine Power	CO
300<HP≤500	Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15% O <sub>2</sub> , or reduce CO emissions by 70% or more.

The permittee is required to maintain each emergency engines/fire pumps as follows:

- Change oil and filter every 500 hours of operation or annually, whichever comes first;
- Inspect air cleaner every 1000 hours of operation or annually, whichever comes first;
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first;
- Follow manufacturer’s operation and maintenance instructions; or implement a maintenance plan which must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

*Subpart CCCCCC—Gasoline Dispensing Facilities*

**40 CFR 63.11111 – Applicability**

**Discussion:** This section defines the various requirements for automotive and aviation gasoline dispensing facilities.

**40 CFR 63.11112 – Affected Emission Units**

**Discussion:** This subpart applies to gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDO. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at the GDO are also included. The equipment used for the refueling of motor vehicles is not covered by this subpart.

**40 CFR 63.11113 – Compliance Dates**

**Discussion:** This section establishes the dates for which all existing, reconstructed, and new affected sources must comply with the requirements of this subsection.

**40 CFR 63.11115 – General Duties for Minimizing Emissions**

**Discussion:** The permittee shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

**40 CFR 63.11116 – Requirements for Facilities with Monthly Throughputs of less than 10,000 Gallons**

**Discussion:** This section addresses the means by which gasoline shall be handled to minimize vapor releases to the atmosphere. All pertinent requirements are contained in the Part 70 OP.

**40 CFR 63.11117 – Requirements for Facilities with Monthly Throughputs of 10,000 Gallons or more**

**Discussion:** This section addresses the means by which gasoline shall be handled to minimize vapor releases to the atmosphere. All pertinent requirements are contained in the Part 70 OP.

**40 CFR 63.11118 – Requirements for Facilities with Monthly Throughputs of 100,000 gallons or more**

**Discussion:** This section addresses the means by which gasoline shall be handled to minimize vapor releases to the atmosphere. All pertinent requirements are contained in the Part 70 OP.

**40 CFR 63.11120 – Testing and Monitoring Requirements**

**Discussion:** All applicable testing and monitoring requirements, from this subsection, are addressed in the Part 70 OP.

**40 CFR 63.11124 – Notification Requirements**

**Discussion:** All applicable notification requirements are addressed in the part 70 OP.

**40 CFR 63.11125 – Recordkeeping Requirements**

**Discussion:** All applicable notification requirements are addressed in the part 70 OP.

**40 CFR 63.11126 – Reporting Requirements**

**Discussion:** All applicable notification requirements are addressed in the part 70 OP.

**40 CFR 63.11130 – Enforcement**

**Discussion:** This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart.

**40 CFR Part 64—Compliance Assurance Monitoring**

**Discussion:** CAM is not applicable to this source.

**VI. COMPLIANCE****A. COMPLIANCE CERTIFICATION**

Recordkeeping requirements are to be kept for all limitations specified in the permit.

## 1. Reporting Requirements

- a. Requirements for compliance certification under AQR 12.5.2.8:
- i. Regardless of the date of issuance of this Part 70 OP, the schedule for the submittal of reports to DAQ shall be that in Table VI-A-1.

**Table VI-A-1. : Reporting Schedule**

Required Report	Applicable Period	Due Date
Semiannual Report for 1st half of the year.	January, February, March, April, May, June	July 30 <sup>th</sup> each year <sup>1</sup>
Semiannual Report for 2nd half of the year. Any additional annual records required.	July, August, September, October, November, December	January 30 <sup>th</sup> each year <sup>1</sup>
Annual Compliance Certification	Calendar year	January 30 <sup>th</sup> each year <sup>1</sup>
Annual Emission Inventory Report	Calendar year	March 31 <sup>st</sup> each year <sup>1</sup>
Annual Emission Statement <sup>2</sup>	Calendar year	March 31 <sup>st</sup> each year <sup>1</sup>
Excess Emission Notification	As required	Within 24 hours of the onset of the event
Excess Emission Report	As required	As soon as practicable but not to exceed 72 hours from notification
Deviation Report	As required	Along with semiannual reports <sup>1</sup>
Excess Emissions that Pose a Potential Imminent and Substantial Danger	As required	Within 12 hours of the permittee learns of the event
Performance Testing Protocol	As required	No less than 45 days, but no more than 90 days, before the anticipated test date <sup>1</sup>
Performance Testing	As required	Within 60 days from the end of the test <sup>1</sup>

<sup>1</sup>If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

<sup>2</sup>Required only for stationary sources that emit 25 tons or more of NO<sub>x</sub> and/or 25 tons or more of VOCs during a calendar year.

- ii. A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods.
- iii. A schedule for submission of compliance certifications during the permit term.
- iv. A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the Act.

## B. COMPLIANCE SUMMARY

**Table VI-B-1: Applicable Regulations**

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR 0	Definitions	Applicable – Creech AFB will comply with all applicable definitions as they apply.	Creech AFB will meet all applicable test methods should new definitions apply.	Creech AFB complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR 4	Control Officer	Applicable – The Control Officer or his representative may enter into Creech AFB property, with or without prior notice, at any reasonable time for purpose of establishing compliance.	Creech AFB will allow Control Officer to enter Station property as required.	Creech AFB complies with applicable requirements.
AQR 5	Interference with Control Officer	Applicable – Creech AFB shall not hinder, obstruct, delay, resist, or interfere with the Control Officer.	Creech AFB will allow Control Officer to operate as needed.	Creech AFB complies with applicable requirements.
AQR 8	Persons Liable for Penalties	Applicable – Creech AFB and employees will be individually and collectively liable to any penalty or punishment from Air Quality.	Creech AFB will adhere to the rules stipulated in applicable AQR.	Creech AFB complies with applicable requirements.
AQR 9	Civil Penalties	Applicable – The rule stipulates penalties for AQR violations.	Creech AFB will adhere to the rules stipulated in applicable AQR.	Creech AFB complies with applicable requirements.
AQR 10	Compliance Schedule	Applicable – Any existing source not in compliance with emission limitations shall submit a compliance schedule.	Creech AFB will adhere to emission limitations and submit a compliance schedule if those limits are exceeded.	Creech AFB complies with applicable requirements.
AQR 11	Ambient Air Quality Standards	Applicable - Creech AFB is a source of air pollutants.	EPA – approved dispersion modeling.	Creech AFB complies with applicable requirements.
AQR 12.0	Applicability, General Requirements and Transition	Applicable – Creech AFB as a whole is not subject to these requirements. Rule outlines source applicability, requirements for a source to obtain a permit and transition for sources that received a permit prior to rulemaking.	Creech AFB applied for and received ATC permits for Air Quality prior to commercial operation. Creech AFB will comply with the requirements of the ATCs.	Creech AFB complies with applicable requirements.
AQR 12.1	Permit Requirements for Minor Sources	Not Applicable.	Creech AFB applied for and received ATC permits for Air Quality prior to commercial operation. Creech AFB will comply with the requirements of the ATCs.	Creech AFB complies with applicable requirements.
AQR 12.2	Permit Requirements for Major Sources in Attainment Areas (PSD)	Not Applicable.	Not Applicable.	Not Applicable.
AQR 12.3	Permit Requirements for Major Sources in Nonattainment Areas	Not Applicable.	Not Applicable.	Not Applicable.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR 12.4	ATC application and Permit Requirements for Part 70 Sources	Applicable – Creech AFB applied for an ATC from Air Quality.	Creech AFB applied for, and received, ATC permits from Air Quality. Creech AFB shall comply with the requirements for ATCs.	Creech AFB complies with applicable requirements.
AQR 12.5	Part 70 OP Requirements	Applicable – Creech AFB as a whole is applicable. Renewal applications are due 6 to 18 months prior to expiration. Revision applications will be submitted within 12 months of commencing operation of a new emission unit.	Creech AFB complies with the requirements for Title V permits outlined in this AQR and with the current ATC.	Creech AFB complies with applicable requirements.
AQR 12.9	Annual Emissions Inventory	Applicable – Creech AFB shall complete and submit an annual emissions inventory.	Annual emission inventories shall be submitted by March 31 each year.	Creech AFB complies with applicable requirements.
AQR 12.10	Continuous Monitoring Requirements	Not Applicable.	Not Applicable.	Not Applicable.
AQR 13.2(b)(1) Subpart A	MACT – General Provisions	Applicable – Creech AFB emits hazardous air pollutants.	Creech AFB complies with the applicable requirements of 40 CFR Part 61 and Part 63.	Creech AFB complies with applicable requirements.
AQR 13.2(b)(82) Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants – Stationary Reciprocating Internal Combustion Engines	Applicable – as of May 3, 2013, for the affected units in this permit.	Applicable compliance, monitoring, recordkeeping, and reporting requirements.	Creech AFB complies with applicable requirements.
AQR 13.2(109)	National Emission Standard for Hazardous Air Pollutants – Gasoline Dispensing Facilities	Applicable –Creech AFB is subject to this regulation.	Applicable compliance, monitoring, recordkeeping, and reporting requirements.	Creech AFB complies with applicable requirements.
AQR 14.1(b)(1) Subpart A	NSPS – General Provisions	Applicable – Creech AFB is an affected source under the regulations. AQR Section 14 is locally enforceable; however, the NSPS standards they reference are federally enforceable.	Applicable monitoring, recordkeeping and reporting requirements.	Creech AFB complies with applicable requirements.
AQR 14.1(b)(68) Subpart OOO	NSPS – Standards of Performance for Nonmetallic Processing Plants	Applicable –Creech AFB is subject to this regulation.	Creech AFB is required to comply with the grain loading standard and opacity requirements.	Creech AFB complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR 14.1(b)(80) Subpart IIII	NSPS – Standards of Performance for Stationary Reciprocating Internal Combustion Engines	Applicable – Creech AFB is subject to this regulation.	Creech AFB has met the required certification for these engines.	Creech AFB complies with applicable requirements.
AQR 18	Permit and Technical Service Fees	Applicable – Creech AFB will be required to pay all required/applicable permit and technical service fees.	Creech AFB is required to pay all required/applicable permit and technical service fees.	Creech AFB complies with applicable requirements.
AQR 21	Acid Rain Permits	Not Applicable.	Not Applicable.	Not Applicable.
AQR 22	Acid Rain Continuous Emission Monitoring	Not Applicable.	Not Applicable.	Not Applicable.
AQR 25	Upset/Breakdown, Malfunctions	Applicable – Any upset, breakdown, emergency condition, or malfunction which causes emissions of regulated air pollutants in excess of any permit limits shall be reported to Control Officer. Section 25.1 is locally and federally enforceable.	Any upset, breakdown, emergency condition, or malfunction in which emissions exceed any permit limit shall be reported to the Control Officer within twenty (24) hours of the time that the permittee learns of the event.	Creech AFB complies with applicable requirements.
AQR 26	Emissions of Visible Air Contaminants	Applicable – Opacity for the Creech AFB combustion turbines must not exceed 20 percent for more than 6 consecutive minutes.	Compliance determined by EPA Method 9.	Creech AFB complies with applicable requirements.
AQR 27	Particulate Matter from Process Weight Rate	Applicable – Creech AFB emission units are required to meet the maximum process weight rate based emission limit based on maximum design and rate of equipment.	Compliance determined by meeting maximum particulate matter discharge rate based on process rate.	Creech AFB complies with applicable requirements.
AQR 28	Fuel Burning Equipment	Applicable – The PM emission rate for the combustion the turbines is well below those established based on Section 28 requirements.	Maximum allowable PM emission rate determined from equation in Section 28.	Creech AFB complies with applicable requirements.
AQR 40	Prohibition of Nuisance Conditions	Applicable – No person shall cause, suffer or allow the discharge from any source whatsoever such quantities of air contaminants or other material which cause a nuisance. Section 40 is locally enforceable only.	Creech AFB air contaminant emissions controlled by pollution control devices or good combustion in order not to cause a nuisance.	Creech AFB complies with applicable requirements.
AQR 41	Fugitive Dust	Applicable – Creech AFB shall take necessary actions to abate fugitive dust from becoming airborne.	Creech AFB utilizes appropriate best practices to not allow airborne fugitive dust.	Creech AFB complies with applicable requirements.



Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR 42	Open Burning	Applicable – In event Creech AFB burns combustible material in any open areas, such burning activity will have been approved by Control Officer in advance. Section 42 is a locally enforceable rule only.	Creech AFB will contact the Air Quality and obtain approval in advance for applicable burning activities as identified in the rule.	Creech AFB complies with applicable requirements.
AQR 43	Odors in the Ambient Air	Applicable – An odor occurrence is a violation if the Control Officer is able to detect the odor twice within a period of an hour, if the odor causes a nuisance, and if the detection of odors is separated by at least fifteen minutes. Section 43 is a locally enforceable rule only.	Creech AFB will not operate its source in a manner which will cause odors.	Creech AFB complies with applicable requirements.
AQR 70.4	Emergency Procedures	Applicable – Creech AFB submitted an emergency standby plan for reducing or eliminating air pollutant emissions in the Section 12.5 OP Application.	Creech AFB submitted an emergency standby plan and received the Section 12.5 OP.	Creech AFB complies with applicable requirements.
AQR 80	Circumvention	Applicable – Creech AFB shall not conceal emissions in any way.	Creech AFB will disclose all emissions as required by state and federal regulations.	Creech AFB complies with applicable requirements.
AQR 92	Fugitive Dust	Applicable – Creech AFB shall take necessary actions to abate fugitive dust from becoming airborne.	Creech AFB utilizes appropriate best practices to not allow airborne fugitive dust.	Creech AFB complies with applicable requirements.
AQR 94	Permitting and Dust Control for Construction Activities.	Applicable – Creech AFB shall apply for a dust control permit in the event of engaging in a construction activity greater than 0.25 acre.	Applicable – Creech AFB shall apply for a dust control permit in the event of engaging in a construction activity greater than 0.25 acre.	Creech AFB complies with applicable requirements.
NRS Ch. 445B	Nevada Revised Statutes, Air pollution	Applicable – Creech AFB shall comply with applicable regulations.	Creech AFB complies with applicable regulations.	Creech AFB complies with applicable requirements.
40 CFR Part 52.21	Prevention of Significant Deterioration	Applicable – Creech AFB is a minor source for PSD.	Creech AFB complies with the regulations of the Section.	Creech AFB complies with applicable requirements.
40 CFR Part 52.1470	State Implementation Plan Rules	Applicable – Creech AFB is subject to the Nevada SIP.	Creech AFB shall continue to comply with the federally enforceable monitoring, testing, recordkeeping, and reporting requirements stipulated in the SIP.	Creech AFB complies with applicable requirements.

<b>Citation</b>	<b>Title</b>	<b>Applicability</b>	<b>Applicable Test Method</b>	<b>Compliance Status</b>
40 CFR Part 60 Subpart A	Standards of Performance for New Stationary Sources – General provisions	Applicable – Creech AFB is an affected facility under NSPS Subpart GG. Therefore, Subpart A provisions are applicable.	Creech AFB shall continue to adhere to applicable monitoring, testing, recordkeeping, and reporting regulations.	Creech AFB complies with applicable requirements.
40 CFR Part 60 Subpart OOO	Standards of Performance for Nonmetallic Processing Plants	Applicable –Creech AFB is subject to this regulation.	Creech AFB is required to comply with the grain loading standard and opacity requirements.	Creech AFB complies with applicable requirements.
40 CFR Part 60 Subpart IIII	Standards of Performance for	Applicable – Creech AFB is subject to this regulation.	Creech AFB shall continue to adhere to applicable monitoring, testing, recordkeeping, and reporting regulations.	Creech AFB complies with applicable requirements.
40 CFR Part 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Applicable – The continuous-duty generators/water pump is subject to this subpart.	Creech AFB shall continue to adhere to the applicable emission limitations, operating and maintenance requirements, recordkeeping, reporting, and general provisions.	Creech AFB complies with applicable requirements.
40 CFR Part 63 Subpart CCCCCC	National Emission Standard for Hazardous Air Pollutants – Gasoline Dispensing Facilities	Applicable –Creech AFB is subject to this regulation.	Creech AFB shall continue to adhere to the applicable emission limitations, operating and maintenance requirements, recordkeeping, reporting, and general provisions.	Creech AFB complies with applicable requirements.
40 CFR Part 64	Compliance Assurance Monitoring	Not Applicable.	Not Applicable.	Not Applicable.
40 CFR Part 68	Chemical Accident Prevention Provisions	Not Applicable.	Not Applicable.	Not Applicable.
40 CFR Part 70	Federally Mandated OPs	Applicable – The regulations provide for the establishment of State air quality permitting systems consistent with the requirements of Title V of the Clean Air Act.	Creech AFB complies with this regulation by maintaining an updated Title V federal operating permit.	Creech AFB complies with applicable requirements.
40 CFR Part 72	Acid Rain Permit Regulations	Not Applicable.	Not Applicable.	Not Applicable.
40 CFR Part 73	Acid Rain Sulfur Dioxide Allowance System	Not Applicable.	Not Applicable.	Not Applicable.
40 CFR Part 75	Acid Rain Continuous Emission Monitoring	Not Applicable.	Not Applicable.	Not Applicable.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
40 CFR Part 82	Protection of Stratospheric Ozone	Applicable – Creech AFB is subject to the applicable rules regarding protection of stratospheric ozone.	Creech AFB does not use or sell a substitute material for a device designated to use a CFC or HCFC and keeps records applicable to the rule onsite.	Creech AFB complies with applicable requirements.

## C. SUMMARY OF MONITORING FOR COMPLIANCE

**Table VI-C-1: Compliance Monitoring**

EU	Regulation (40 CFR)	Regulatory Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	Averaging Period Comparison			Streamlining Statement
					Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	
A003	60.672(b) and 60.675(c) (3) (OOO)	(Opacity) $\leq 12\%$	$\leq 12\%$	Yes	30 minutes (five 6 minute averages)		Yes	The permit requirements and federal standards are identical
A001, A003a, A003b	60.672(b) and 60.675(c) (3) (OOO)	(Opacity) $\leq 7\%$	$\leq 7\%$	Yes	30 minutes (five 6 minute averages)		Yes	The permit requirements and federal standards are identical
B001	63.6595 (ZZZZ)	CO 49 ppmvd or reduced by 70% or more	CO 49 ppmvd or reduced by 70% or more	Yes	Initial testing		Yes	The permit requirements and federal standards are identical
G005, G006, G014, G016, G017, G027, G057, G117, G118, G123, G124, G127, G136, F137, G138, G141, G142, G143, G145, G148, G149, G150, G153, G154, G156, G157, G158, G159, G162, G163, G164, G165, G166, G167	60.4205(a) and 60.4211 (III)	Various limits for NO <sub>x</sub> , CO, PM, and VOC pollutants based on model year and engine power rating		Yes	Compliance demonstrated by keeping records of engine manufacturer's certified emissions data		Yes	The permit requirements and federal standards are identical

EU	Regulation (40 CFR)	Regulatory Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	Averaging Period Comparison			Streamlining Statement
					Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	
G025, G130, G131, G133, G134, G151, G152	60.4205(c) and 60.4211 (III)	Various limits for NOx, CO, PM, and VOC pollutants based on model year and engine power rating		Yes	Compliance demonstrated by keeping records of engine manufacturer's certified emissions data		Yes	The permit requirements and federal standards are identical
G003, G004, G013, G015, G019, G020, G021, G022, G026, G058, G139, G140	63.6640 (ZZZZ)	Various maintenance requirements and CO emission limits based on engine power rating		Yes	Compliance is demonstrated by keeping records of engine manufacturer's certified emission data and maintenance and repair logs.		Yes	The permit requirements and federal standards are identical
J001, J002	63.11116 (a) and 63.11117 (b) (CCCCC C)	1. Cover open gasoline containers 2. Storage tank fill pipes seal with gasket 3. Minimize gasoline sent to open waste collection systems 4. Minimize spills and clean up expeditiously 5. Before 11/09/2006, submerged fill pipe maximum 12" from bottom of tank. 6. After 11/09/2006, submerged fill pipe maximum 6" from bottom of tank.		Yes	Compliance is demonstrated by maintaining records and submitting reports as specified in 63.11125 and 63.11126		Yes	The permit requirements and federal standards are identical
J001, J002	63.11118 (b) (CCCCC C)	1. Phase I dual point vapor balance system required (minimum 95% control) 2. Liquid fill connections shall be equipped with vapor tight caps 3. Pressure/vacuum vents shall be installed on storage tank vent pipes. 4. Cargo tankers must be vapor tight 5. Vapor connections and lines on storage tank shall be equipped with closures that seal upon disconnect.		Yes	Compliance is demonstrated by following the testing requirements of 63.11120 and also by maintaining records and submitting reports as specified in 63.11125 and 63.11126		Yes	The permit requirements and federal standards are identical

EU	Regulation (40 CFR)	Regulatory Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	Averaging Period Comparison			Streamlining Statement
					Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	
		6. Pressure in the tanks shall not exceed 5.9 inches of vacuum during product transfer.						
J001, J002	63.11118 (d)	1. All hoses, couplers, and adapters used to deliver fuel from tanker shall be vapor tight. 2. All hatches on the tanker shall be closed and securely fastened. 3. All hoses in the vapor balance system shall be properly connected prior to fuel delivery.	Yes		Compliance is demonstrated by following the testing requirements of 63.11120 and also by maintaining records and submitting reports as specified in 63.11125 and 63.11126		Yes	The permit requirements and federal standards are identical

## VII. EMISSION REDUCTION CREDITS (OFFSETS)

The permittee is not required to obtain offsets in this permitting action.

## VIII. ADMINISTRATIVE REQUIREMENTS

AQR Section 12.5 requires that Air Quality identify the original authority for each term or condition in the Part 70 OP. Such reference of origin or citation is denoted by [italic text in brackets] after each Part 70 OP condition. Air Quality proposes to issue the Part 70 OP conditions on the following basis:

### Legal:

On December 5, 2001, in 66 FR 30097, EPA fully approved the Title V Operating Permit Program submitted by DAQ for the purpose of complying with the Title V requirements of the 1990 CAAA and implementing 40 CFR Part 70.

### Factual:

Creech AFB has supplied all the necessary information for Air Quality to draft Part 70 OP conditions, encompassing all applicable requirements and corresponding compliance.

### Conclusion:

DAQ has determined that Creech AFB will continue to determine compliance through the use of performance testing, semi-annual reporting, and daily and monthly recordkeeping coupled with annual certifications of compliance. Air Quality proceeds with the decision that a Part 70 OP should be issued as drafted to Creech AFB for a period not to exceed five years.

## IX. MODELING

### A. INCREMENT ANALYSIS

Creech Air Force Base is a major source in Hydrographic Areas 160, 161, 168, 211 and 212. Since minor source baseline dates for NO<sub>x</sub> (October 21, 1988) and SO<sub>2</sub> (June 29, 1979) have been triggered for HA 212, Prevention of Significant Deterioration (PSD) increment analysis is required. Permitted emission units include boilers, generators, fire pumps, mineral processing, surface coating and fuel dispensing.

DAQ modeled the source using AERMOD to track the increment consumption. Stack data submitted by the applicant were supplemented with information available for similar emission units. Five years (2011 to 2015) of meteorological data from the McCarran Station were used in the model. U.S. Geological Survey National Elevation Dataset terrain data were used to calculate elevations. Table IX-A-1 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

**Table IX-A-1: PSD Increment Consumption**

Pollutant	Averaging Period	Source's PSD Increment Consumption (µg/m <sup>3</sup> )	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
SO <sub>2</sub>	3-hour	0.20 <sup>1</sup>	635894	4039603
SO <sub>2</sub>	24-hour	0.03 <sup>1</sup>	635894	4039603
SO <sub>2</sub>	Annual	0.01	638680	4037248
NO <sub>x</sub>	Annual	0.01	638680	4037248

<sup>1</sup> Highest Second High Concentration.

## X. ATTACHMENTS

### Internal Combustion

EU#	G166		Horsepower:	208		Emission Factor (lb/hp-hr)	Potential Emissions		
Make:			Hours/Day:				lb/hr	lb/day	ton/yr
Model:			Hours/Year	500		PM10	2.20E-03	0.46	0.11
S/N:						NOx	3.10E-02	6.44	1.61
Manufacturer Guarantees						CO	6.71E-03	1.40	0.35
PM10	1.34	g/kW-hr ▼				SO <sub>2</sub>	1.21E-05	0.01	0.01
NOx	18.84	g/kW-hr ▼				VOC	2.52E-03	0.52	0.13
CO	4.08	g/kW-hr ▼				HAP	2.71E-05	0.01	0.01
SO <sub>2</sub>		g/hp-hr ▼							
VOC	1.53	g/kW-hr ▼							
Engine Type: Diesel ▼					Diesel Fuel Sulfur Content is 15 ppm (0.0015%)				

EU#	G167		Horsepower:	755			Emission Factor (lb/hp-hr)	Control Efficiency	Potential Emissions		
Make:			Hours/Day:						lb/hr	lb/day	ton/yr
Model:			Hours/Year	500		PM10	6.61E-05	0.00%	0.05	0.00	0.01
S/N:						NOx	1.14E-02	0.00%	8.57	0.00	2.14
						CO	9.26E-04	0.00%	0.70	0.00	0.17
Manufacturer Guarantees											
PM10	0.03	g/hp-hr ▼				SO <sub>2</sub>	1.21E-05	0.00%	0.01	0.00	0.01
NOx	5.15	g/hp-hr ▼				VOC	1.76E-04	0.00%	0.13	0.00	0.03
CO	0.42	g/hp-hr ▼				HAP	1.10E-05	0.00%	0.01	0.00	0.01
SO <sub>2</sub>		g/hp-hr ▼									
VOC	0.08	g/hp-hr ▼									
Engine Type: Diesel ▼						Diesel Fuel Sulfur Content is 15 ppm (0.0015%)					

## Crushing Emissions

		Maximum Capacity (ton/hr)	PM <sub>10</sub> EF (lbs/ton)	PM <sub>2.5</sub> EF (lbs/ton)	Hours	Applicability			PM <sub>10</sub> EF (lbs/ton)	PM <sub>2.5</sub> EF (lbs/ton)	Hours	Allowable	
EU						PM <sub>10</sub>	PM <sub>2.5</sub>					PM <sub>10</sub>	PM <sub>2.5</sub>
A001	Loading	250	0.0011	0.00031	8760	1.20	0.34	520000	0.00005	0.00001	2080	0.01	0.01
	Crushing	250	0.0024	0.00044	8760	2.63	0.48	520000	0.00054	0.0001	2080	0.14	0.03
	Transfer Point	250	0.0011	0.00031	8760	1.20	0.34	520000	0.00005	0.00001	2080	0.01	0.01
	Screening	250	0.0087	0.00059	8760	9.53	0.65	520000	0.00074	0.00005	2080	0.19	0.01
A003	Screen to Side Discharge Conveyor	250	0.0011	0.00031	8760	1.20	0.34	520000	0.00005	0.00001	2080	0.01	0.01
	Screen to Front Discharge Conveyor	250	0.0011	0.00031	8760	1.20	0.34	520000	0.00005	0.00001	2080	0.01	0.01
	Screen to Front Oversize Conveyor	250	0.0011	0.00031	8760	1.20	0.34	520000	0.00005	0.00001	2080	0.01	0.01
	Screen to Discharge Conveyor	250	0.0011	0.00031	8760	1.20	0.34	520000	0.00005	0.00001	2080	0.01	0.01
A003a	Stacker	250	0.0011	0.00031	8760	1.20	0.34	520000	0.00005	0.00001	2080	0.01	0.01
A003b	Stacker	250	0.0011	0.00031	8760	1.20	0.34	520000	0.00005	0.00001	2080	0.01	0.01
A017	Truck Loading	250	0.0001	0.000028	8760	0.11	0.03	520000	0.000016	4.5E-06	2080	0.01	0.01
A015	Storage Piles - 2 Acres	2 Acres										0.61	0.09
A016	Unpaved Haul Roads											8.75	1.32
	Total					21.79	3.87					9.81	1.54

## Insignificant Activities Calculations

### Tanks

For calculation details, see PDF 00473\_20210809\_SUP, pages 2–7.

Total Insignificant (Jet Fuel, Waste Fuel, and Diesel) Storage Tanks/Loading Racks/Fuel Loading

**VOCs**  
1.14

**HAPs**  
0.06

Blasting

Building #	Manufacturer	Capacity	Abrasive Material (lb/hour)	Abrasive Material (lb/year)	EF (lb/1000 lb)	PM <sub>10</sub> PTE (tpy)	PM <sub>2.5</sub> PTE (tpy)
227	Custom-made	10.0' x 25" x 65"	50	10,000	0.69	0.003	0.003
227	Econoline	5.0' x 4.0' x 4.0'	50	10,000	0.69	0.003	0.003
791	Pauli Systems	5.0' x 4.0' x 3.0'	50	10,000	0.69	0.003	0.003
2284	Abrasive Blasting Systems	5.0' x 4.0' x 4.0'	50	10,000	0.69	0.003	0.003
						0.01	0.01

Degreasers:

Building #	Manufacturer	Model Number	Serial Number	Capacity (gallons)	Consumption (gallons/year)	VOC Content (lb/gallons)	VOC PTE (tpy)
52	Spray Master	SM9400	19099187		25	6.6	0.08
115	Clarus	PCS-15	004938	No VOC		6.6	0.00
225	Clarus	PCS-25	003569	27.5	25	6.6	0.08
279	Aladin Cleaning System	2085E	71533	85	25	6.6	0.08
1011	Snap-On	PBC4828	TBD	30	25	6.6	0.08
3953	ChemFree SmartWasher	28-1	2105055	25	25	6.6	0.08
Total New PTE							0.41

For all other emissions not identified in this TSD, see **00473\_20200430\_TSD.docx**.